

GLOSSARY

Advanced High-Capacity Transit (AHCT):

A general term used to describe several types of high capacity, line-haul transit modes. AHCT is used to designate a future mode, such as LRT or BRT to serve the corridor prior to the selection of the specific mode.

Affected Transportation Network:

Refers to the roadway segments, or “links,” that are included in the analysis of emissions of mobile source air toxics. The affected transportation network includes the proposed project roadway segments and other links (roads) where traffic volumes would be expected to change by plus or minus five percent as a result of the proposed project.

Alternative:

General term that refers to possible approaches to meeting the need for and purpose of the project including corridor, transportation mode, and alignment. Typically refers to the No Build and the Build Alternatives.

Alternative Alignment:

Refers to a proposed routing of the Build Alternative.

Ambient Air Quality:

The state of quality of the air in the surrounding environment.

Aquatic Resources:

For the purpose of this study, aquatic resources are defined as both adjacent and isolated wetlands and waters.

Aquifer:

A water-bearing geologic unit of permeable rock, sand, or gravel that yields considerable quantities of water to springs and wells.

Attainment:

Status of the various pollutants described in the National Ambient Air Quality Standards (NAAQS). A condition where a pollutant meets NAAQS.

Average Daily Traffic:

Average traffic volume in a 24-hour period on a particular roadway.

Build Alternative:

The Build Alternatives consist of a roadway constructed or reconstructed on a new existing location within the project area.

Bus Rapid Transit (BRT):

Combines the user-friendly aspects of some rail service with the flexibility of a bus system. BRT can operate on streets, expressways, HOV lanes, or exclusive transitways.

Capacity Improvements:

The addition of travel lanes to accommodate more traffic volume.



1 **Carbon Monoxide (CO):**

2 A colorless, odorless, poisonous gas that is formed as a product of the incomplete
3 combustion of carbon and is emitted directly by automobiles and trucks.

4 **Community Cohesion:**

5 The connections between and within communities which are essential for serving the
6 needs of the residents.

7 **Commuter Rail:**

8 A passenger rail service between a city center and its suburbs. It may use locomotives to
9 pull passenger cars, self-propelled passenger vehicles, or overhead-electric supplied
10 vehicles.

11 **Corridor:**

12 General location of a highway and its surrounding areas.

13 **Crash Rate:**

14 The number of crashes per 100 million vehicle miles traveled.

15 **Cultural Resources:**

16 Patterned physical remains of human activity distributed over the landscape through
17 time.

18 **Cumulative Effect/Impact:**

19 An impact on the environment which results from the incremental impact of the action
20 when added to other past, present, and reasonably foreseeable future actions, regardless
21 of what agency (federal or non-federal) or person undertakes such other actions.

22 **Diamond Lanes:**

23 A class of HOV lanes that operate without the physical barriers, generally pavement
24 markings, to separate HOV traffic from general traffic.

25 **Environmental Justice:**

26 In accord with Executive Order 12898, the avoidance of actions that cause
27 disproportionately high and adverse impacts on minority and low-income populations
28 with respect to human health and the environment.

29 **Floodplain:**

30 The portion of a river or stream valley, adjacent to the channel, which is covered with
31 water when the river or stream overflows its banks at flood stage. It is also defined as
32 low land and relatively flat areas adjoining inland and coastal waters including, at a
33 minimum, that area subject to a one percent or greater chance of flooding in any given
34 year (the 100-year floodplain).

35 **Floodway:**

36 The channel of a river or other watercourse and the adjacent land areas that must be
37 reserved in order to discharge the base flood without cumulatively increasing the water
38 surface elevation more than a designated height.

39 **Groundwater:**

40 Subsurface water that occurs beneath the water table in soils and geologic formations
41 that are fully saturated.



Hazardous Air Pollutants:

HAPs refer to a range of compounds that include the precursors of ozone and are known or suspected by the EPA to have serious health or environmental impacts. MSATs are also considered HAPs.

Heterozygosity

The state of having two different alleles of the same gene.

High Occupancy Toll (HOT) Lanes:

HOT lanes charge low occupancy vehicles a toll, while high-occupancy vehicles are allowed to use the lanes free or at a discounted toll rate.

High Occupancy Vehicle (HOV) Lanes:

Lanes used for carpools, vanpools, and buses and are usually separated from general-purpose lanes by concrete traffic barriers.

Historic Archeological Site:

Any subsurface cultural manifestation dated post-European

Impact/Effect:

In environment analyses, the words “impact” or “effect” are used to express the extent or severity of an environmental problem, e.g., the number of persons displaced by a new transportation facility. As indicated in CEQ 1500 (Section 1508.8), impacts and effects are considered to be synonymous. Impacts or effects may be ecological, aesthetic, historic, cultural, economic, social, or health related, and they may be direct, indirect, or cumulative.

Indirect Effect/Impact:

An impact that is caused by an action, and is later in time or farther in distance but is still reasonably foreseeable.

Intelligent Transportation Systems (ITS):

A broad range of activities and systems that use advanced technology to increase overall transportation system efficiency. ITS technologies are applied to infrastructure, vehicles, travelers, and the operators of transportation system components.

Interstate Highways (IH)/Freeways:

These are divided highways with two or more lanes designated for the exclusive use of vehicular traffic. These roadways are intended to provide uninterrupted flow. There are no signalized or stop-controlled at-grade intersections. Direct access from adjacent properties is not permitted. Access is limited to ramp locations, and opposing directions are separated by a raised barrier, a median, or a raised traffic island.

Examples of Interstate Highways are IH 10 and IH 35. The term “freeway” in this document is consistent with terminology in the Transportation Research Boards (TRB) Highway Capacity Manual (2000). Any divided arterial with complete access control and unimpeded traffic flow is designated a freeway, whether it is tolled or not.



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2 Level of Service (LOS):

3 Operating conditions within a stream of traffic describing safety, traffic interruptions,
4 speed, freedom to maneuver, comfort, and convenience. Six levels of service are defined,
5 designated A through F, with A representing the best conditions and F the worst.

6 Light Rail Transit (LRT):

7 Typically a “light” vehicle that may operate in an open ROW or within a street in mixed-
8 flow with traffic. Overhead wires supply power to the transit vehicle. Light rail can
9 carry medium-to-heavy passenger volumes.

10 Low-Income Population:

11 A population whose household income is below the Department of Health and Human
12 Services poverty guidelines.

13 Major Arterials:

14 Roadways that carry a large number of vehicles, possibly serving more regional traffic.

15 Managed Facility:

16 A separate facility within a freeway that combines several desirable features to optimize
17 capacity, LOS, and air quality benefits. One feature is that the facilities have limited
18 entry and exit opportunities. The second feature of a managed facility is the possible
19 collection of tolls as a means of value pricing. Value pricing means that tolls would
20 change based on peak-hour trips or vehicle occupancy.

21 Mobile Source Air Toxics (MSATs):

22 A category of substances in the air that are known or suspected of causing cancer or
23 other health problems in humans, and for which a National Ambient Air Quality
24 standard (NAAQS) does not exist (i.e., excluding ozone, carbon monoxide, particulate
25 matter, sulfur dioxide, nitrogen oxide).

26 Mode (Transportation):

27 Types of transportation uses that might include bus transit, HOV lanes, rail, bicycle, and
28 pedestrian.

29 National Register:

30 The National Register of Historic Places (NRHP), as maintained by the United States
31 Department of the Interior, pursuant to 16 USC § 470a. Properties listed in the Register
32 include districts, sites, buildings, structures, and objects that are significant in American
33 history, architecture, archeology, engineering, and culture. It is the nation’s official list of
34 cultural resources worthy of preservation.

35 NEPA Document:

36 Any document or report prepared by or on behalf of a federal agency pursuant to the
37 National Environmental Policy Act (NEPA) for a project including, but not necessarily
38 limited to, any Environmental Assessment (EA), Finding of No Significant Impact, Draft
39 EIS, Final EIS, or Record of Decision, but not including any pre-decisional, deliberative,
40 or privileged materials.

41 Nitrogen Oxide (NO_x):

42 Colorless, sweet-tasting gas emitted directly by automobiles and trucks.

**Nonattainment:**

An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for criteria pollutants.

Notice of Intent (NOI):

An NOI is published in the Federal Register to notify the public that an agency is preparing an EIS.

Ozone:

Unstable blue-colored gas with a pungent odor formed principally in indirect reactions involving volatile organic compounds, nitrogen oxides and sunlight. Ground-level ozone is an air pollutant with harmful effects on our respiratory system.

Palustrine Emergent Wetland:

Wetlands that are characterized by erect, herbaceous vegetation present for most of the growing season (i.e., marshes, wet meadows, fens, sloughs, or potholes).

Palustrine Forested Wetland:

Wetlands that are characterized by woody vegetation greater than 20 feet (6 meters) in height (i.e., swamps of bottomlands).

Palustrine Scrub-Shrub Wetland:

Wetlands that are characterized by woody vegetation less than 20 feet (6 meters) in height (i.e., shrub swamps, or wet thickets).

Preferred alternative:

The alternative that the proponent (FHWA/TxDOT/Alamo RMA) believes would fulfill its statutory mission and responsibilities and is consistent with the need for and purpose of the project, while giving consideration to economic, environmental, technical, and other factors, including public and agency comments received in response to the Draft EIS.

Prehistoric Archeological Site:

Any cultural manifestation predating European contact.

Project:

The whole of an action that has a potential for resulting in a physical change in the environment, directly or ultimately, and that is any of the following:

(1) An activity directly undertaken by any public agency, including but not limited to public works construction and related activities, clearing or grading of land improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-62. An activity undertaken by a person, which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

(2) An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

**1 Project Area:**

2 The area bounded in which alternatives have been located.

3 Resource Study Area (RSA):

4 A geographic area that was identified for each resource, which was evaluated during the
5 cumulative effects analysis. The health of the resource was evaluated within the entire
6 RSA.

7 Riparian:

8 Pertaining to anything connected with or immediately adjacent to the banks of a stream.

9 Section 106:

10 Section 106 of the National Historic Preservation Act of 1966, 16 USC § 470(f). Pertains to
11 the protection and preservation of historic resources.

12 Section 4(f):

13 Section 4(f) of the Department of Transportation Act of 1966, 49 USC § 303(c). Pertains to
14 the protection of a Section 4(f) resource. Section 4(f) Resource: Any park, recreation area,
15 wildlife or waterfowl refuge or historic site that is protected under Section 4(f).

16 Transportation Demand Management (TDM):

17 Behavioral changes to commuters' travel habits that result in fewer vehicles during peak
18 hours. Examples would be carpooling/vanpooling, employee trip reduction programs,
19 compressed work weeks, telecommuting, flex-time, and employer incentives.

20 Transportation System Management (TSM):

21 Management to make the existing transportation system as efficient as possible.
22 Examples would be park and ride lots, ridesharing, HOV facilities, traffic signal
23 coordination, and intersection improvements.

24 Travel Demand:

25 The number of users desiring to travel the highway system based on the available
26 roadway network.

27 Upland Habitat:

28 Land that has sufficient dry conditions for hydrophytic vegetation, hydric soils, and/or
29 wetland hydrology to be lacking. Any area that is not a wetland, deepwater aquatic
30 habitat, or other special aquatic site is considered upland habitat.

31 Vehicle Hours Traveled (VHT):

32 The time (in hours) that users spend on the roadway system during a specific time
33 period.

34 Viewshed:

35 All land seen from one static point.

36 Watershed:

37 A specific geographic area drained by a major stream or river.

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Wetland (Isolated):

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions. Isolated wetlands do not lie within the 100-year floodplain nor do they have a hydrologic connection to navigable waters.

Wetland (Jurisdictional):

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions. Adjacent wetlands also lie within the 100-year floodplain and/or have a hydrologic connection to navigable waters.



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